This Page is Inserted by IFW Indexing and Scanning Operations and is not part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

□ BLACK BORDERS
□ IMAGE CUT OFF AT TOP, BOTTOM OR SIDES
□ FADED TEXT OR DRAWING
□ BLURRED OR ILLEGIBLE TEXT OR DRAWING
□ SKEWED/SLANTED IMAGES
□ COLOR OR BLACK AND WHITE PHOTOGRAPHS
□ GRAY SCALE DOCUMENTS
□ LINES OR MARKS ON ORIGINAL DOCUMENT
□ REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY
□ OTHER: ____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.

Art Unit: ***

1. (Currently Amended) A method for the secure printing of print data from a client application residing on a data network to an interface device which has a printer, said interface device residing on a digital cable network which has a cable head end for interfacing said digital cable network to said data network, said method comprising the steps of:

generating print data in said client application;

determining whether a first secure communication path is established paths
exist between said client application and said cable head end, and whether a second secure
communication path is established between said cable head end and said interface device;
and

transmitting, in response to a determination that said <u>first and second</u> secure communication paths <u>are established exist</u>, said print data from said client application to said interface device[[;]], <u>wherein and sending</u> said print data <u>is sent to said printer</u> from said interface device to said printer for printing.

client application and said cable head end, and between said cable head end and said interface device.

2. (Currently Amended) A method according to Claim 1, wherein the step for determining whether said <u>first and second</u> secure communication paths <u>are established</u> exist between said client application and <u>said cable head end</u>, and between said cable head <u>end</u> and said interface device <u>comprises includes</u> the use of a secure protocol between said

client application and said cable head end, and between said cable head end and said interface device.

Art Unit: ***

- 3. (Currently Amended) A method according to Claim 2, wherein the step for determining whether said <u>first and second</u> secure communication paths <u>are established</u> exist between said client application and <u>said cable head end</u>, and between said cable head <u>end</u> and said interface device further <u>comprises includes</u> a confirmation through said secure protocol, that said cable head end is a secure location, and a confirmation, through said secure protocol, that said interface device is a secure location.
- 4. (Currently Amended) A method according to Claim 1, wherein the step for transmitting, in response to a determination that said <u>first and second</u> secure communication paths <u>are established exist</u>, said print data from said client application to said interface device <u>comprises</u> includes sending said print data from said client application to said cable head end in a device-independent format, transforming <u>in said cable head end</u> said print data from said device-independent format to a rasterized format which corresponds to said printer, and then sending said print data in said rasterized format from said cable head end to said interface device for printing <u>by on</u> said printer.
- 5. (Currently Amended) A method according to Claim 1, wherein the step for transmitting, in response to a determination that said first and second secure communication paths are established exist, said print data from said client application to said interface device comprises includes encrypting said print data by said client application, sending said encrypted print data from said client application to said cable head end, sending said encrypted print data from said cable head end to said interface device, decrypting said print data in said interface device, and sending the decrypted print data to said printer for printing.

Art Unit: ***

6. (Previously Presented) A method according to Claim 3, wherein said confirmation that said interface device is a secure location is sent from said interface device to said cable head end.

- 7. (Original) A method according to Claim 3, wherein said confirmation that said cable head end is a secure location is sent from said cable head end to said client application.
- 8. (Currently Amended) A method according to Claim 1, wherein the step for transmitting, in response to a determination that said <u>first and second</u> secure communication paths <u>are established exist</u>, said print data from said client application to said interface device <u>comprises</u> includes transforming, by said client application, said print data from a <u>said</u> device-independent format to a rasterized format which corresponds to said printer, sending said print data in said rasterized format from said client application to said cable head end, and then sending said print data in said rasterized format from said cable head end to said interface device for printing <u>by</u> on said printer.
- (Original) A method according to Claim 2, wherein said secure protocol
 is a secure sockets layer protocol.
- 10. (Currently Amended) A method according to Claim 2, wherein the step for determining whether said first and second secure communication paths are established exist between said client application and said cable head end, and between said cable head end and said interface device comprises includes the transmission of at least one certificate from said interface device to said cable head end and the transmission of at least one certificate from said cable head end to said client application.

Art Unit: ***

11. (Currently Amended) A method for the secure printing of print data from a client application residing on a data network to an interface device which has a printer, said interface device residing on a digital cable network which has a cable head end for interfacing said digital cable network to said data network, said method comprising the steps of:[[;]]

generating print data in said client application;

determining that a <u>first</u> secure communication path <u>is established exists</u> between said client application and said cable head end upon receipt through a secure protocol of a confirmation from said cable head end that said cable head end is a secure location,

sending, in response to the [[a]] determination that said first secure communication path is established exists, said print data from said client application to said cable head end in a device-independent format;

transforming, in said cable head end, said print data from said deviceindependent format to a rasterized format which corresponds to said printer;

determining that a <u>second</u> secure communication path <u>is established</u> exists between said cable head end and said interface device upon receipt, through a secure protocol, of a confirmation from said interface device that said interface device is a secure location; and

sending, in response to the [[a]] determination that said second secure communication path is established exists, said print data in said rasterized format from said cable head end to said interface device for printing by on said printer.

Art Unit: ***

12. (Currently Amended) A method for the secure printing of print data from a client application residing on a data network to an interface device which has a printer, said interface device residing on a digital cable network which has a cable head end for interfacing said digital cable network to said data network, said method comprising the steps of:

generating print data in said client application;

transforming, in said client application, said print data from a deviceindependent format to a rasterized format in accordance with a printer driver corresponding
to said printer attached to said interface device which corresponds to said printer;

encrypting, in said client application, said print data in said rasterized format;

sending said encrypted print data in said rasterized format from said client application to said cable head end;

sending said encrypted print data in said rasterized format from said cable head end to said interface device; and

decrypting, in said interface device, said print data in said rasterized format for printing by on said printer.

Art Unit: ***

13. (Previously Presented) An apparatus for the secure printing of print data from a client application residing on a data network to an interface device which has a printer, said interface device residing on a digital cable network which has a cable head end for interfacing said digital cable network to said data network, comprising:

a program memory for storing process steps executable to perform a method according to any of Claims 1 to 12; and

a processor for executing the process steps stored in said program memory.

- 14. (Previously Presented) Computer-executable process steps stored on a computer readable medium, said computer-executable process steps for the secure printing of print data from a client application residing on a data network to an interface device which has a printer, said interface device residing on a digital cable network which has a cable head end for interfacing said digital cable network to said data network, said computer-executable process steps comprising process steps executable to perform a method according to any of Claims 1 to 12.
- 15. (Previously Presented) A computer-readable medium which stores computer-executable process steps, the computer-executable process steps to achieve the

secure printing of print data from a client application residing on a data network to an interface device which has a printer, said interface device residing on a digital cable network which has a cable head end for interfacing said digital cable network to said data network, said computer-executable process steps comprising process steps executable to perform a method according to any of Claims 1 to 12.

Art Unit: ***

16. (Previously Presented) A method according to Claim 1, wherein said interface device is a set top box.

17. (Previously Presented) A method according to Claim 11, wherein said interface device is a set top box.

18. (Previously Presented) A method according to Claim 12, wherein said interface device is a set top box.

19. (Previously Presented) An apparatus according to Claim 13, wherein said interface device is a set top box.

20. (Previously Presented) Computer-executable process steps according to Claim 14, wherein said interface device is a set top box.

21. (Previously Presented) A computer-readable medium according to Claim 15, wherein said interface device is a set top box.

22 to 29. (Cancelled)